

Abstract

(A stabilizer combination for halogen-containing thermoplastic resin compositions)

The invention relates to a stabilizer combination for halogen-containing thermoplastic resins, encompassing:

- a) calcium oxide and/or calcium hydroxide, where these, where appropriate, have been surface-modified;
- b) at least one tin compound of the general formula (I)



where

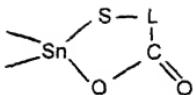
n is 1 or 2;

each of the groups R, which may be identical or different, is a straight-chain or branched alkyl group having from 1 to 22 carbon atoms;

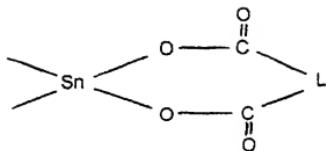
each of the groups X, which may be identical or different, is -S- or -O-; and

each of the groups R', which may be identical or different, is a straight-chain or branched alkyl group having from 1 to 22 carbon atoms, or a $-[C(O)]_m-L-C(O)-O-R''$ group or a $-[C(O)]_m-L-O-C(O)-R''$ group, where m is 0 or 1, -L- is a divalent connecting group which is selected from alkylene groups having from 1 to 4 carbon atoms, or a vinylene group, and R'' is an alkyl group having from 1 to 22 carbon atoms; or

two (X-R') groups may have bonding to one another to form a heterocyclic ring of the formula (I') or (I'')



(I') or



(I'')

where L is as defined above; and

c) at least one zinc compound selected from liquid and solid zinc salts of saturated, unsaturated, straight-chain, or branched mono- or polyfunctional aromatic or aliphatic carboxylic acids, zinc oxide and zinc hydroxide;

with the proviso that no perchlorate is present in the stabilizer combination.

The stabilizer combination of the invention is suitable for stabilizing PVC, in particular rigid PVC (UPVC). UPVC stabilized using the stabilizer combination of the invention has high thermal stability and excellent weathering resistance, and is particularly suitable for the outdoor sector.